# CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD. An ISO 9001-2008 & OHSAS 18001:2007 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha

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Reference No	:	CEMC/ASL/ Jun -A-06/20
Name of Company	:	Ardent Steel Ltd.
Sample Description	:	Ambient Air
Date of Monitoring	:	11.06.2020
Date of Receiving	:	12.06.2020
Date of Analysis	:	12.06.2020
Sample Collected by	:	Mr.B Samantaray

#### AMBIENT AIR QUALITY TEST REPORT (24 HOURLY AVERAGE)

Sl.			Μ	ONITORI	NG REPO	PORT	
No.	LOCATION	$PM_{10}$	$PM_{2.5}$	$SO_2$	NOx	CO	NH <sub>3</sub>
110.		$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(mg/m^3)$	$(\mu g/m^3)$
1	At the boundary near the						
	water harvesting pond	71.8	38.8	11.6	17.2	0.5	<20
	(East Direction)						
2	At the Boundary near	67.8	36.5	11.7	16.1	0.5	<20
	ESP (South Direction)	07.8	50.5	11./	10.1	0.3	<20
3	At the Boundary near						
	Coal Fines Stock yard	71.3	37.8	12.4	17.1	0.5	<20
	(North Direction)						
4	Near Ball mill, Iron ore	72.8	38.9	11.9	14.8	0.4	<20
	fines stock yard	12.8	30.9	11.9	14.0	0.4	<20
NAA	Q Standard					400 (µg/m <sup>3</sup> )	

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Reference No	:	CEMC/ASL/ Jun -F-06/20
Name of Company	:	Ardent Steel Ltd.
Sample Description	:	Fugitive Air
Date of Monitoring	:	11.06.2020
Date of Receiving	:	12.06.2020
Date of Analysis	:	12.06.2020
Sample Collected by	:	Mr.B Samantaray

#### FUGITIVE EMISSION TEST REPORT

Sl.		RESULT			
No.	LOCATION	RSPM (µg/m <sup>3</sup> )	SPM (µg/m <sup>3</sup> )		
1	Proportioning System (Ash & Coke Fines Bunker)	328	1120		
2	Raw Material Transfer point of Mixture (Mixture Building)	310	998		
3	Ball Mill (Cool Grinding)	320	1082		
4	Ball Mill (Flux & Coke Grinding)	315	1098		
5	Finished Product Transfer points and plant de-dusting system	301	1092		
6	Travelling Grate & Rotary Kiln	330	1002		
	MoEF Standard for SPM 2000*				

\* The standard is applicable at 10 m distance from the source

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> Laboratory At: Plot No. 800/1274, Johal, Pahal, Bhubaneswar-752101, . . . N 4 - 1 - 1 -



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Reference No:CEMC/ASL/Jun-N-06/20Name of Company:Ardent Steel Ltd.Sample Description:Noise Monitoring ReportDate of Monitoring:11.06.2020Sample Collected by:Mr.B Samantaray

#### NOISE LEVEL STUDY REPORT

Sl. No.	Location	Noise Level In Day Time dB(A)	Noise Level In Night Time dB(A)
01	Ball Mill (Cool Grinding)	74.2	65.4
02	Raw Material Transfer point of Mixture (Mixture Building)	71.2	68.6

#### NATIONAL STANDARD NOISE LEVEL

Area	Category of Area/Zone	Permissible Limit in dB (A)			
Code		Day Time Night Time			
Α	Industrial Area	75	70		
В	Commercial Area	65	55		
С	Residential Area	55	45		
D	Silence Zone	50	40		

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Reference No Name of Company Sample Description Date of Monitoring Sample Collected by Stack Height CEMC/ASL/ Jun -ST-06/20 Ardent Steel Ltd. Stack Monitoring 11.06.2020 Mr.B Samantaray 30m

#### STACK EMISSION REPORT

Sl. No.	Location of Sampling	Flue Gas Temp. in K	Concentration of Particulate Matter (PM) in mg/Nm <sup>3</sup> Result
01	ESP	396	48.2

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Reference No	:	CEMC/ASL/Jun -GW-06/20
Name of Company	:	Ardent Steel Ltd.
Sample Description	:	Ground Water
Date of Monitoring	:	11.06.2020
Date of Receiving	:	12.06.2020
Date of Analysis	:	12.06.2020
Sample Collected by	:	Mr.B Samantaray
Sample Location	:	Canteen(RO Water)

#### **Desired Limit of Permissible Limit** SI. drinking water Unit of drinking water Result Parameter No (BIS:10500:2012) (BIS:10500:2012) 1 Colour Hazen 5 <5 15 2 Odour Agreeable Agreeable AL -3 Taste Agreeable AL 4 Turbidity NTU 5 <1 1 No Relaxation 5 pH Value @ 25°C 6.5-8.5 6.52 -Total Dissolved Solid 500 2000 82 6 mg/l 7 Alkalinity as CaCO<sub>3</sub> mg/l 200 600 38 200 8 Total Hardness as CaCO<sub>3</sub> mg/l 600 32 9 Iron as Fe 0.3 No Relaxation 0.09 mg/l 10 Nitrate as NO<sub>3</sub><sup>-</sup>N 45 No Relaxation 0.32 mg/l

mg/l

mg/l

mg/l

mg/l

#### **GROUND WATER TEST REPORT**

N.B: AL – Agreeable

Sulphate as SO<sub>4</sub>

Fluoride as F

Calcium as Ca

Chloride as Cl

11

12

13

14

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Authorized Signatory Notes: d.

agemen

400

1.5

200

1000

1.42

<0.05 9.22

2.9

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200

1.0

75

250

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Reference No Name of Company Sample Description Date of Monitoring Date of Receiving Date of Analysis Sample Collected by Sample Location CEMC/ASL/Jun -SW-06/20 Ardent Steel Ltd. Surface Water 11.06.2020 12.06.2020 12.06.2020 Mr.B Samantaray Reservoir

#### SURFACE WATER TEST REPORT

Sl. No	Parameter	Unit	GSR 422E Standards	Result
1	Colour	Hazen		5
2	Odour	-		U/O
3	pH Value @ 25°C	-	5.5-9.0	7.26
4	Total Dissolved Solid	mg/l	2100	322.6
5	Iron as Fe	mg/l	3.0	0.32
6	Sulphate as SO <sub>4</sub>	mg/l	1000	16.4
7	Nitrate as NO <sub>3</sub> <sup>-</sup> -N	mg/l	50	14.5
8	Boron as B	mg/l	2.0	0.16
9	BOD for 3 days @ 27 <sup>0</sup> C	mg/l	30	2.6
10	COD	mg/l	250	22.8

**N.B:** U/O- Un-objectionable

MROI

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Reference No:Name of Company:Sample Description:Date of Monitoring:Date of Receiving:Date of Analysis:Sample Collected by:Sample Location:

CEMC/ASL/Jun -WW-06/20 Ardent Steel Ltd. Waste Water 11.06.2020 12.06.2020 12.06.2020 Mr.B Samantaray STP Outlet

# ANALYSIS RESULT

Sl. No.	Parameter	Unit	Effluent Discharge Standard	Testing Method	Result
1.	pH Value @ 25°C		6.5-9.0	APHA 4500 $H^+$ B	7.35
2.	Total Suspended Solids	mg/l	<20	APHA 2540 D	14.6
3.	B.O.D for 3 days @ 27°C	mg/l	<10	APHA 5210 B	10.0
4.	COD	mg/l	<50	APHA 5220 C	42
5.	Oil & Grease	mg/l		APHA 5520 B	1.4

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